

substrate, the second conductive tracks being arranged to reduce eddy currents induced in the second conductive tracks, each second conductive track having a width that is narrower than the first conductive track.

a<sup>1</sup>  
10. The apparatus according to claim 9, wherein the second conductive tracks are arranged substantially so as not to be aligned directly underneath the planar winding of the inductor in order to decrease a parasitic capacitance between the second conductive tracks and the inductor.

11. The apparatus according to claim 9, wherein the planar winding of the inductor has a shape that is generally circular.

12. The apparatus according to claim 9, wherein the planar winding of the inductor has a shape that is generally spiral.

13. The apparatus according to claim 9, wherein the planar winding of the inductor has a shape that is generally rectangular.

14. The apparatus according to claim 9, further comprising:  
a first layer disposed above the substrate and below the inductor.

15. The apparatus according to claim 14, wherein the first layer is a resistive layer.

16. The apparatus according to claim 14, wherein the resistive layer is a doped semiconductor.

17. The apparatus according to claim 16, wherein the doped semiconductor has a doping level ranging between approximately  $10^{16}$  and  $10^{19}$  atoms/cm<sup>3</sup>.

18. The apparatus according to claim 17, wherein the doping level is on the order of

$10^{17}$  atoms/cm<sup>3</sup>.

19. The apparatus according to claim 9, wherein the substrate is a doped semiconductor.

20. The apparatus of claim 9, wherein the second conductive tracks are configured to be electrically connected to a fixed voltage during operation.

21. The apparatus of claim 9, wherein at least some second conductive tracks that cross directly under the first conductive track are arranged substantially to cross perpendicularly in order to reduce a mutual inductance between the first and second conductive tracks.

22. The apparatus of claim 9, wherein at least some second conductive tracks which are adjacent to the first conductive track are arranged so as to be substantially parallel to at least two rectilinear sections of the first conductive track and equidistant between them.

23. The apparatus of claim 9, wherein at least some second conductive tracks which are not arranged substantially perpendicular to the first conductive track are arranged to bisect angles formed by the first conductive track.

24. An apparatus comprising:

a substrate;

an inductor including a first conductive track deposited in the form of a planar winding above the substrate; and

a plurality of second conductive tracks located between the inductor and the substrate, the second conductive tracks being arranged to reduce eddy currents induced in the second conductive tracks, each second conductive track being adjacent to the first conductive track and arranged so as to be substantially parallel to at least two rectilinear sections of the first conductive track and equidistant between them.

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25. An apparatus comprising:  
a substrate;  
an inductor including a first conductive track deposited in the form of a planar winding above the substrate; and  
a plurality of second conductive tracks located between the inductor and the substrate, at least some second conductive tracks of the plurality being arranged to bisect angles formed by the first conductive tracks.
26. An apparatus comprising:  
a substrate;  
an inductor including a first conductive track deposited in the form of a planar winding above the substrate; and  
a plurality of second conductive tracks located between the inductor and the substrate, at least some second conductive tracks of the plurality being arranged to form at least one cross shape with another second conductive track of the plurality.
27. An apparatus comprising:  
a substrate;  
an inductor formed including a first conductive track deposited in the form of a planar winding above the substrate; and  
a plurality of second conductive tracks located between the inductor and the substrate, at least some second conductive tracks of the plurality being arranged to form at least one arrowhead shape with another second conductive track of the plurality.
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